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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,527	05/09/2001	Lydie Bougueleret	45.US2.PCT	8473
23557	7590	07/28/2004	EXAMINER	
SALIWANCHIK LLOYD & SALIWANCHIK A PROFESSIONAL ASSOCIATION 2421 N.W. 41ST STREET SUITE A-1 GAINESVILLE, FL 32606-6669			PAK, YONG D	
			ART UNIT	PAPER NUMBER
			1652	

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,527

Applicant(s)

BOUGUELERET, LYDIE

Examiner

Yong D Pak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-76 and 78-81 is/are pending in the application.
- 4a) Of the above claim(s) 80 and 81 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43-76, 78 and 79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 6, 2004 has been entered.

The amendment filed on December 5, 2003, amending claim 43 and canceling claims 1-42, and 77, has been entered.

Claims 43-76 and 78-81 are pending.

Election/Restrictions

Further, claims 80-81 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 43-76 and 78-79 are rejected under 35 U.S.C. 102(b) as being anticipated by Greene et al. (WO 96/21736).

Applicants argue that the reference of Green et al. does not teach a composition comprising a contiguous span that is a truncated polypeptide of SEQ ID NO:4 but only teaches fragments of SEQ ID NO:2. The examiner disagrees.

Greene et al. teaches a human geranylgeranyl pyrophosphate synthetase (hGGPPS) that is 100% identical to SEQ ID NO:4 of the instant invention, which has a Phe at position 204, a Phe at position 295, a Cys residue at position 205 and a Pro residue at position 225 (Figure 3 and pages 6-7). This amino acid sequence is clearly identified as an "hGGPS of the present invention" (page 6).

Greene et al. teaches a composition comprising fragments of hGGPPS of SEQ ID NO:2 and a HGGPPS encoded by the cDNA of the deposited clone (ATCC Deposit No. 75900). Greene et al. teaches a composition comprising of a polypeptide having hGGPPS activity and comprising of at least 6 contiguous residues of SEQ ID NO:4, including at least one residues from position 204, 295, 205 and 225 . A truncated polypeptide of SEQ ID NO:4 can be construed as a fragment of SEQ ID NO:4 since a truncated polypeptide is a part broken off or detached from the unmodified polypeptide. Greene et al. teach fragments or portions of the GGPPS polypeptide modified by

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deletion, and therefore, the fragments of Greene et al. can be construed as enzymatically active fragments consisting of the necessary length of amino acids (pages 9-10).

Greene et al. also teach a composition wherein the polypeptide comprises an amino acid sequence employed for the purification of the polypeptides (pages 10-12). The GGPPS polypeptide of Greene et al. also binds to the human GGPPS or fragments of the human GGPPS. Greene et al. also teach a method of making GGPPS polypeptides (pages 17-18). Therefore, the teachings of Greene et al. anticipate claims 43-76 and 78-79.

Claims 43-76 and 78-79 are rejected under 35 U.S.C. 102(e) as being anticipated by Greene et al. (U.S. Patent 5,786,193).

Applicants argue that the reference of Green et al. does not teach a composition comprising a contiguous span that is a truncated polypeptide of SEQ ID NO:4 but only teaches fragments of SEQ ID NO:2. The examiner disagrees.

Greene et al. teaches a human geranylgeranyl pyrophosphate synthetase (hGGPPS) that is 100% identical to SEQ ID NO:4 of the instant invention, which has a Phe at position 204, a Phe at position 295, a Cys residue at position 205 and a Pro residue at position 225 (figure on front of the patent, Figure 3 and Column 3, lines 44-49). This amino acid sequence is clearly identified as an "hGGPS of the present invention" (Column 3, lines 45-46).

Greene et al. teaches a composition comprising fragments of hGGPPS of SEQ ID NO:2 and a HGGPPS encoded by the cDNA of the deposited clone (ATCC Deposit No. 75900). Greene et al. teaches a composition comprising of a polypeptide having hGGPPS activity and comprising of at least 6 contiguous residues of SEQ ID NO:4, including at least one residues from position 204, 295, 205 and 225. A truncated polypeptide of SEQ ID NO:4 can be construed as a fragment of SEQ ID NO:4 since a truncated polypeptide is a part broken off or detached from the unmodified polypeptide. Greene et al. teach fragments or portions of the GGPPS polypeptide modified by deletion, and therefore, the fragments of Greene et al. can be construed as enzymatically active fragments consisting of the necessary length of amino acids (pages Columns 4-7).

Greene et al. also teach a composition wherein the polypeptide comprises an amino acid sequence employed for the purification of the polypeptides (Columns 4-7). The GGPPS polypeptide of Greene et al. also binds to the human GGPPS or fragments of the human GGPPS. Greene et al. also teach a method of making the GGPPS polypeptides (Columns 4-7). Therefore, the teachings of Greene et al. anticipate claims 43-76 and 78-79.



PONNATHAPU ACHUTHAMURTHY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

No claims are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Pak whose telephone number is 703-308-9363. The examiner can normally be reached on 6:30 A.M. to 5:00 P.M. Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 703-308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Yong Pak
Patent Examiner

July 19, 2004